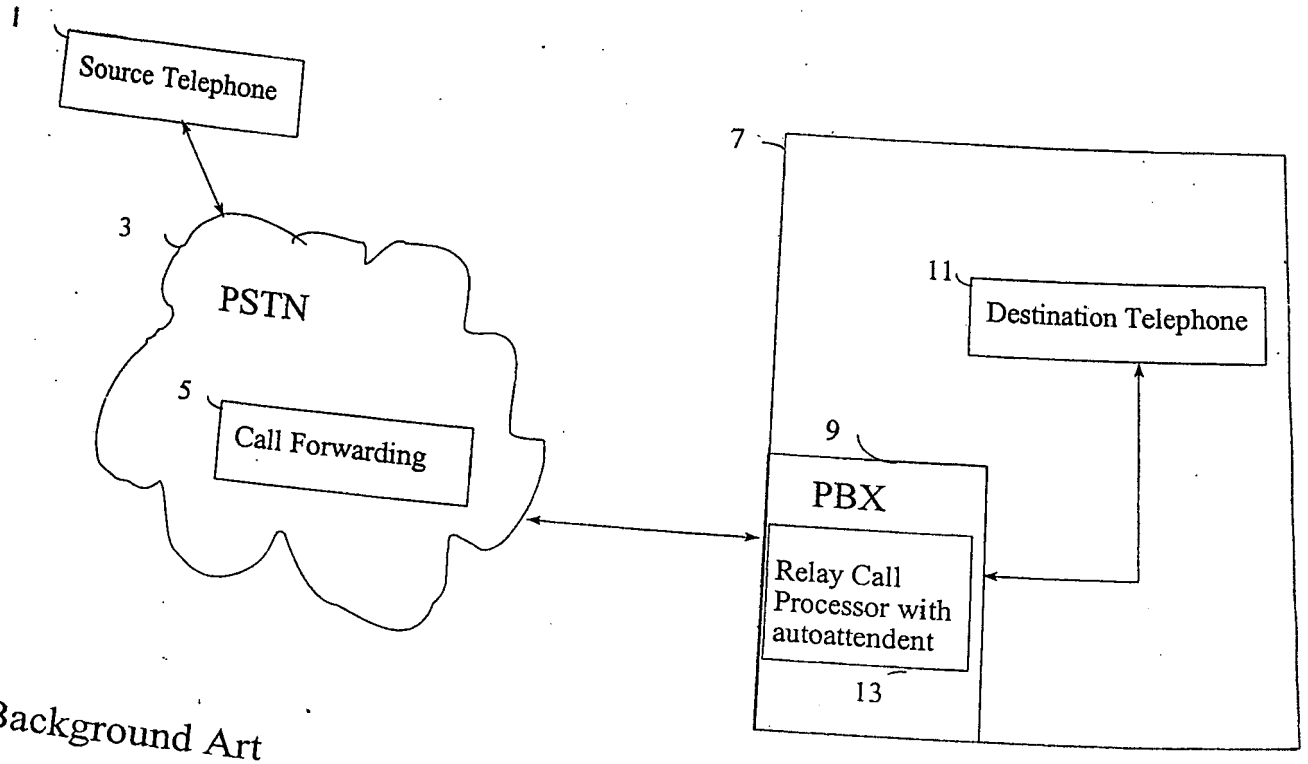
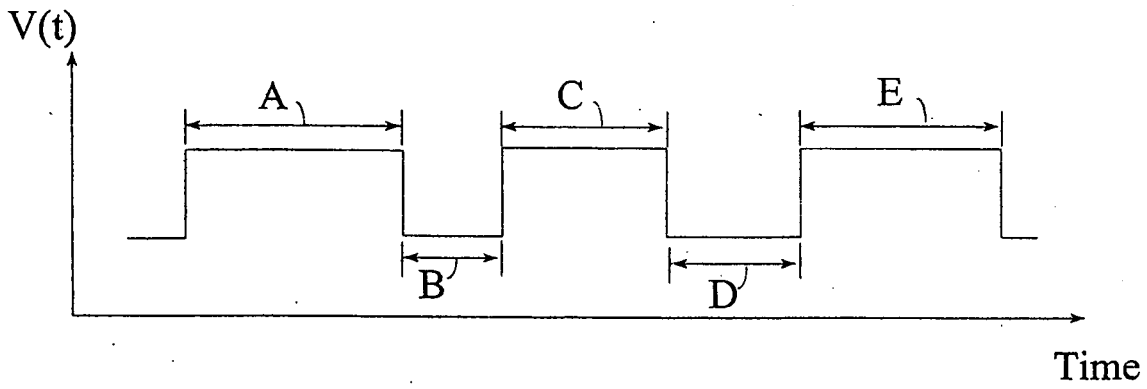



Background Art

FIG. 1

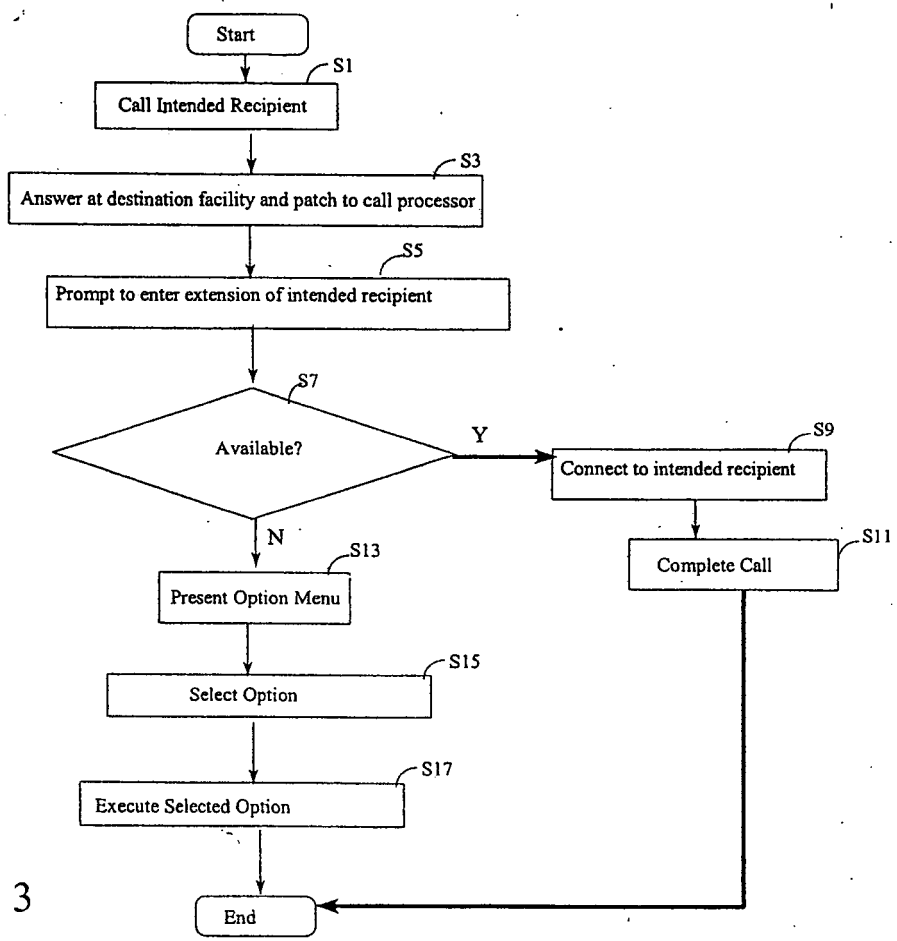
OIPE JC25 MAY 28 2004 PATENT & TRADEMARK




Background Art

FIG. 2

PATENT & TRADEMARK OFFICE
MAY 28 2004
JC25




Background Art

Fig. 3

PATENT & TRADEMARK OFFICE
MAY 28 2004

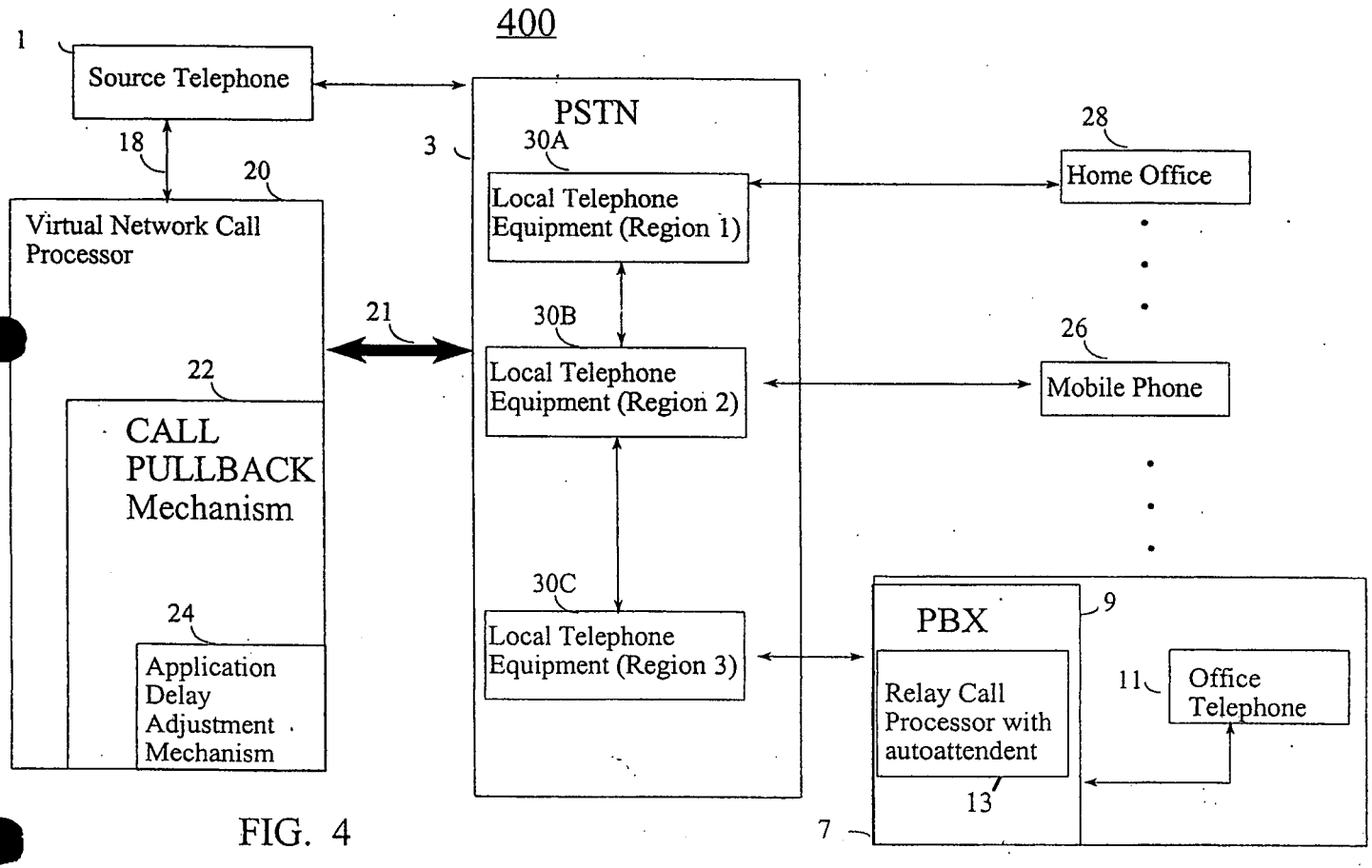

400
1
Source Telephone
18
20
Virtual Network Call Processor
21
22
CALL PULLBACK Mechanism
24
Application Delay Adjustment Mechanism
3
PSTN
30A
Local Telephone Equipment (Region 1)
30B
Local Telephone Equipment (Region 2)
30C
Local Telephone Equipment (Region 3)
28
Home Office
26
Mobile Phone
9
PBX
Relay Call Processor with autoattendent
13
11
Office Telephone
7

FIG. 4

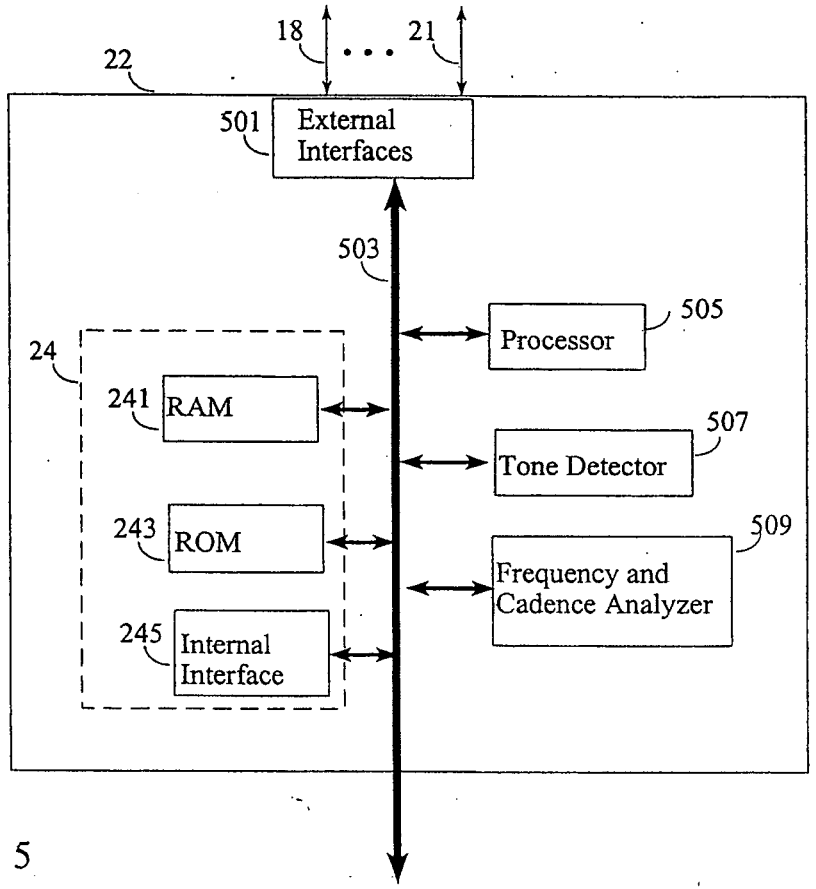

18
21
22
501
External Interfaces
503
505
Processor
24
241
RAM
507
Tone Detector
243
ROM
509
Frequency and Cadence Analyzer
245
Internal Interface

FIG. 5

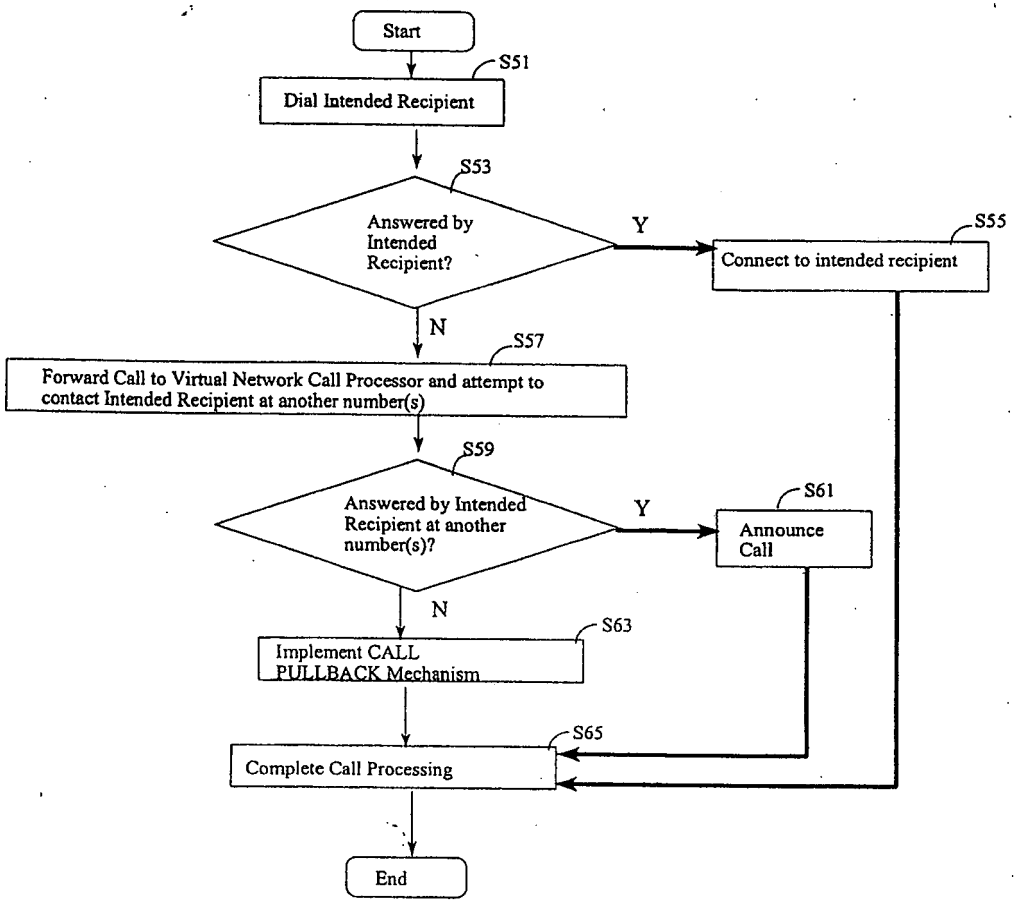

Start
S51
Dial Intended Recipient
S53
Answered by Intended Recipient?
Y
S55
Connect to intended recipient
N
S57
Forward Call to Virtual Network Call Processor and attempt to contact Intended Recipient at another number(s)
S59
Answered by Intended Recipient at another number(s)?
Y
S61
Announce Call
N
S63
Implement CALL PULLBACK Mechanism
S65
Complete Call Processing
End

Fig. 6

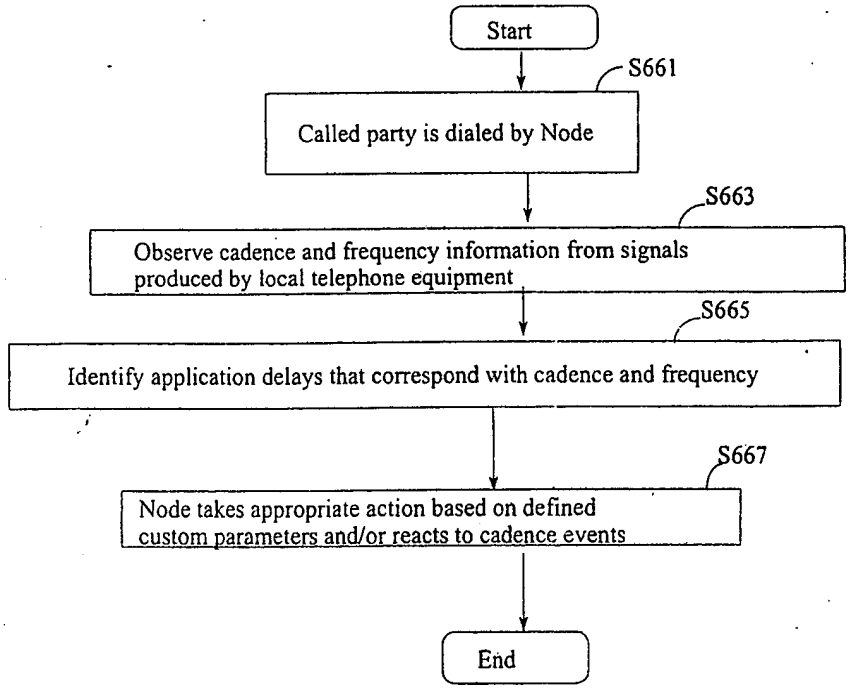
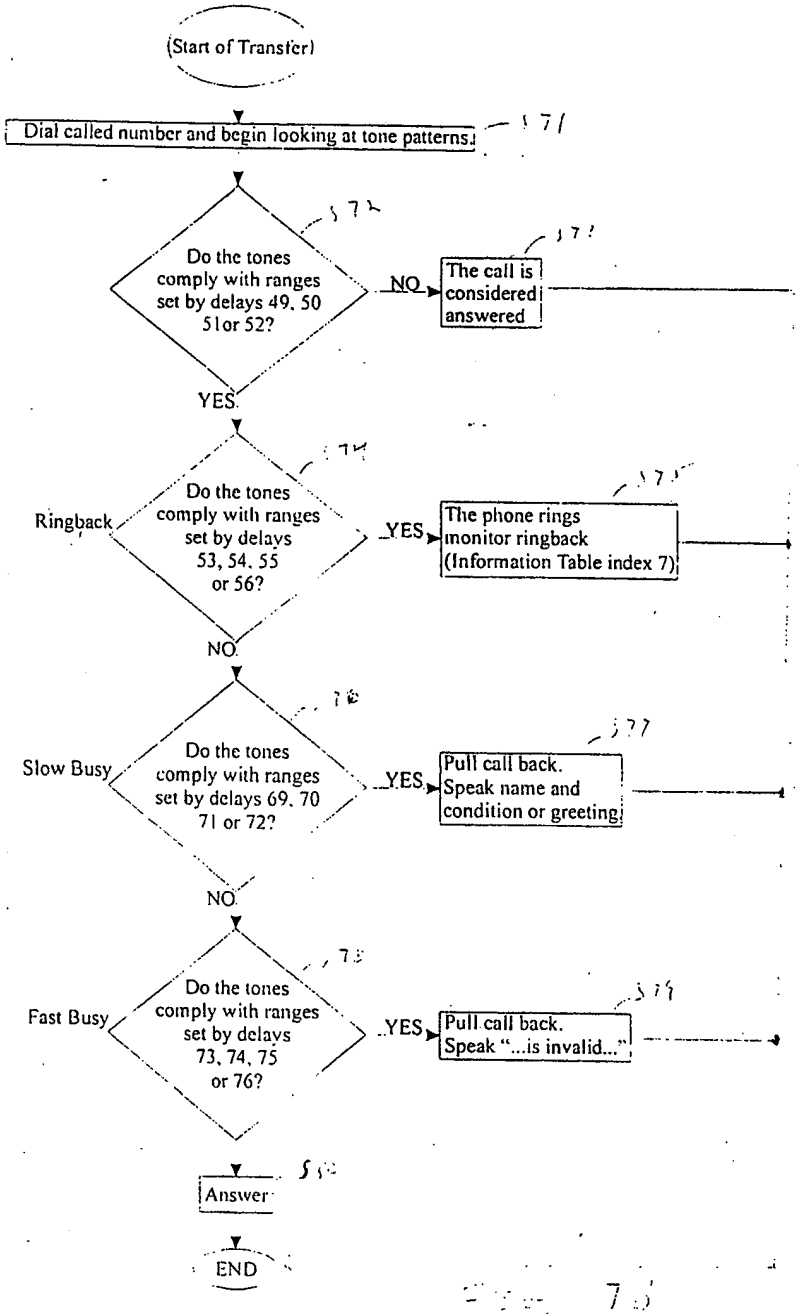

Start
S661
Called party is dialed by Node
S663
Observe cadence and frequency information from signals produced by local telephone equipment
S665
Identify application delays that correspond with cadence and frequency
S667
Node takes appropriate action based on defined custom parameters and/or reacts to cadence events
End

Fig. 7A


(Start of Transfer)
Dial called number and begin looking at tone patterns
Do the tones comply with ranges set by delays 49, 50 51or 52?
NO
The call is considered answered
YES
Ringback
Do the tones comply with ranges set by delays 53, 54, 55 or 56?
YES
The phone rings monitor ringback (Information Table index 7)
NO
Slow Busy
Do the tones comply with ranges set by delays 69, 70 71 or 72?
YES
Pull call back. Speak name and condition or greeting
NO
Fast Busy
Do the tones comply with ranges set by delays 73, 74, 75 or 76?
YES
Pull call back. Speak "...is invalid..."
Answer
END

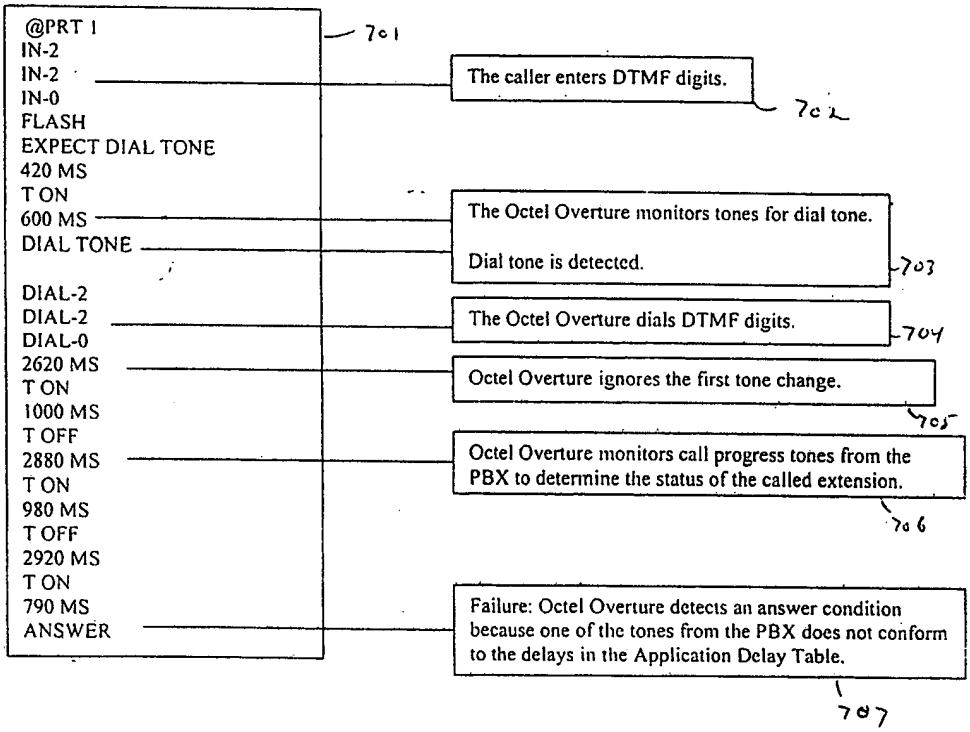

@PRT 1
IN-2
IN-2
IN-0
FLASH
EXPECT DIAL TONE
420 MS
T ON
600 MS
DIAL TONE
DIAL-2
DIAL-2
DIAL-0
2620 MS
T ON
1000 MS
T OFF
2880 MS
T ON
980 MS
T OFF
2920 MS
T ON
790 MS
ANSWER
701
The caller enters DTMF digits.
702
The Octel Overture monitors tones for dial tone.
Dial tone is detected.
703
The Octel Overture dials DTMF digits.
704
Octel Overture ignores the first tone change.
705
Octel Overture monitors call progress tones from the PBX to determine the status of the called extension.
706
Failure: Octel Overture detects an answer condition because one of the tones from the PBX does not conform to the delays in the Application Delay Table.
707

Figure 7C

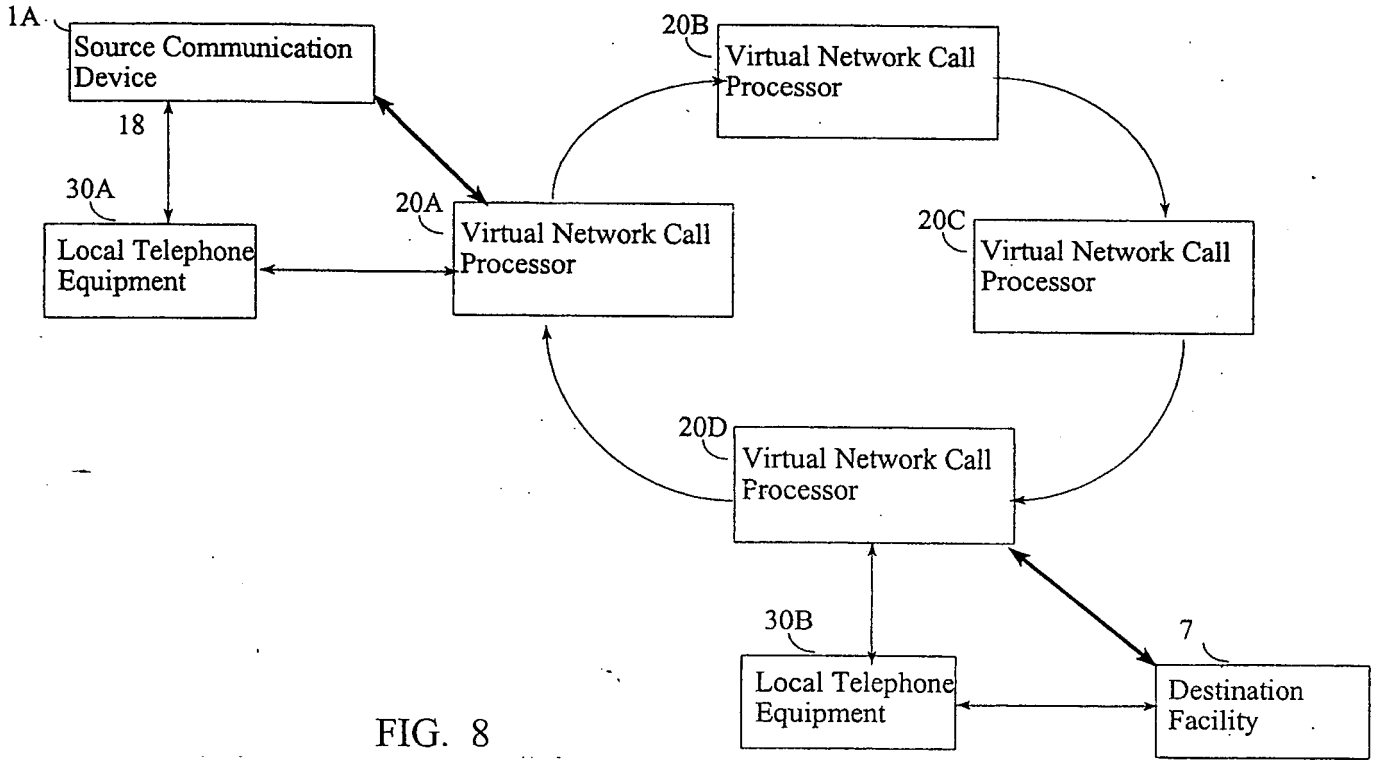

700
1A
Source Communication Device
18
30A
Local Telephone Equipment
20A
Virtual Network Call Processor
20B
Virtual Network Call Processor
20C
Virtual Network Call Processor
20D
Virtual Network Call Processor
30B
Local Telephone Equipment
7
Destination Facility

FIG. 8